

SOCIETY OF PHOTOGRAPHIC SCIENTISTS AND ENGINEERS

1330 Massachusetts Avenue, N.W. Washington, D.C. 20005



1968
SYMPOSIUM
ON
PHOTO-ELECTRONIC
IMAGING

Marriott-Twin Bridges
Washington, D. C.

Oct. 31 - Nov. 2, 1968

THEODOR H NELSON
YASSAR COLLEGE
POUGHKEEPSIE N.Y.
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SOCIETY OF PHOTOGRAPHIC SCIENTISTS AND ENGINEERS

1330 Massachusetts Avenue, N.W., Washington, D.C. 20005 202-347-1140



August 22, 1968

Marriott-Twin Bridges

Washington, D. C.

Oct. 31 - Nov. 2, 1968

Dear Members and Friends of SPSE:

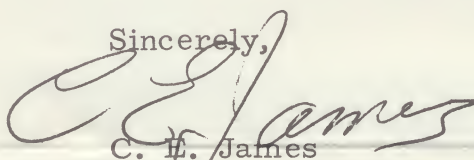
The response to the forthcoming symposium on photo-electron imaging is most gratifying. As with any emerging technology we have encountered some obstacles, both in security classification and proprietary information. I am now pleased to announce that our Chairman, Bob Jones, is bringing together an agenda full of interesting and informative papers.

The enclosed preliminary program is substantially complete; however, if there are any changes I will call it to your attention in a later note.

Remember, a copy of the pre-print papers will be available without charge for advanced registration.

I will look forward to seeing you Thursday morning at the tutorial session.

Sincerely,



C. E. James

P. S.: Don't miss the cocktail party Thursday evening; it's sponsored by industry.

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**SOCIETY OF PHOTOGRAPHIC
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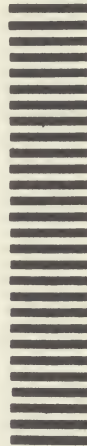
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SOCIETY OF PHOTOGRAPHIC SCIENTISTS AND ENGINEERS

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**1968
SYMPOSIUM
ON
PHOTO-ELECTRONIC
IMAGING**

Marriott-Twin Bridges
Washington, D. C.

Oct. 31 - Nov. 2, 1968

THEODOR H NELSON M
YASSAR COLLEGE II
POUGHKEEPSIE N.Y.
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"Equipment for MTF Measurement of Image Intensifier"
T. Moss, Ealing Corporation

"Composite Electronic Probe Microanalyzer X-Ray Scanning Images in Color"
H. Yakowitz & K. F. Heinrich, National Bureau of Standards

November 2, 1968 — Saturday A.M.

SESSION V

IMAGE FORMATION AND SPECIFICATION OF ELECTRO-OPTICAL SYSTEMS

Chairman: D. R. Craig

Papers:

"The Recording of Electro-Optical Imagery"
J. H. Altman, Eastman Kodak Company

"Electronic Beam Recording System"
S. P. Birkelund, 3M Company

"A New Film for Dry Photo-Electronic Imagery"
V. L. Wagner Jr., Kalvar Corporation

"What's All This Fuss About Rapid Processing"
C. B. Krumm, USAF, Wright Patterson AFB

"Calibration and Specification of Electro-Optical Systems"
L. M. Biberman, Institute for Defense Analysis

"Optimal Selection of Spectral Regions in Low Light Devices"
R. R. Legault, Institute for Defense Analysis

"Electromagnetic Radiation Characteristic Data Bank"
P. D. Fligor, Technology, Inc.

November 2, 1968 — Saturday P.M.

SESSION VI

PANEL DISCUSSION

Topics: "Discussion of Symposium — The Future for Photo-Electronic Imaging"

Conference ChairmanC. E. James
Fairchild Hiller Corporation

Papers ChairmanRobert A. Jones
The Perkin-Elmer Corporation

Arrangements ChairmanEdward D. Llerena
Eastman Kodak Company

Exhibits ChairmanWilliam S. Dempsey
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Membership applications and listing of Society publications are available at the SPSE booth in the exhibit area and at the registration desk. After the conference, this material, in addition to other information about the Society, can be obtained from the SPSE office. Write Mr. Jack Acuff, Executive Director, 1330 Massachusetts Avenue, N.W., Washington, D.C. 20005.

CHAPTERS

SPSE chapters are located in Binghamton, Rochester and New York, N.Y., Boston, Massachusetts; Cleveland and Dayton, Ohio; Southern Connecticut; Monmouth; New Jersey; the San Francisco Bay area and Los Angeles, California; Twin Cities, Minnesota; Chicago, Illinois and Washington, D.C.

SOCIETY OF PHOTOGRAPHIC SCIENTISTS AND ENGINEERS



Preliminary Program

SYMPOSIUM ON PHOTO-ELECTRONIC IMAGING

Marriott Twin Bridges Motor Hotel
Washington, D.C.

October 31 - November 2, 1968

Society of Photographic Scientists and Engineers
1330 Massachusetts Ave., N.W.
Washington, D.C. 20005

1968 Fall Symposium

"Photo Electronic Imaging"

This Symposium continues the SPSE tradition for selecting a timely and provocative field for in-depth study. For the purpose of this Symposium, Photo-Electronic Imaging is defined as any imaging system in which optics, electronic photosensitive devices, materials and photographic processes play a major role.

Five papers sessions are being presented, beginning with a Tutorial Introduction Session by a group of scientists, each an authority in his field. Each of the other sessions focuses on a particular aspect and is introduced by an invited state-of-the-art review paper covering significant developments in the field.

After reviewing the program which follows, we hope you also believe that the meeting will be timely, provocative and above all, informative. Plan to attend.

Copies of the advanced registration form for this Symposium can be obtained by contacting the SPSE office at 1330 Massachusetts Ave., N.W., Washington, D.C. 20005. Telephone: (202) 347-1140.

PHOTO-ELECTRONIC IMAGING SYMPOSIUM

Preliminary Program

October 31, 1968 — Thursday A.M.

SESSION I

TUTORIAL INTRODUCTION

Chairman: T. S. Huang

Papers:

"Tutorial: Photo Electronic Imaging"
T. S. Huang, Massachusetts Institute of Technology

"Tutorial: Pictorial Encoding"
M. R. Winkler, Bell Aerosystems Co.

"Tutorial: Signal Treatment"
R. Nathan, Jet Propulsion Laboratory

"Tutorial: Image Formulation"
D. R. Craig, Fairchild-Hiller Corporation

October 31, 1968 — Thursday P.M.

SESSION II

PHOTO-ELECTRONIC CAMERA SYSTEMS

Chairman: L. J. Kosofsky

Papers:

"Photo-Electronic Imaging Systems in Space Exploration"
L. J. Kosofsky, NASA

"High Resolution Technique Images from Space"
F. H. Eastman III & M. V. Sullivan, RCA, Astroelectronics Div.

"A Video Technique to Enhance the Performance of High Acuity Reconnaissance Cameras"
N. M. Gutlove & R. Wakeman, Fairchild Space & Defense Systems

"On the Design of Low Light Level Electro-Optical Imaging Systems"
R. J. Heimer, Fairchild Space & Defense Systems

"Recording of Star Spectra with an Electrostatic Image Intensifier"
J. R. Hansen, Westinghouse Electric Corporation and
J. K. de Jonge & W. R. Beardsley, University of Pittsburgh

"Infrared to Visible Image Translation Devices"
R. W. Asthiemer, Barnes Engineering Company

November 1, 1968 — Friday A.M.

SESSION III

PICTORIAL ENCODING

Chairman: M. R. Winkler

Papers:

"Source Coding Experimentation"
F. Scott & P. Hollanda, Perkin-Elmer Corporation and
A. Harabedian, Human Factors Research

"Film Reading and Data Compression"
G. H. Harmon, Information International Corporation

"Development of a Scanner-Digitizer for Opaque Material"
H. M. Manard & E. S. Okonski, Cornell Aeronautical Laboratory

"Scan-A-Lyzer Information Processing System"
R. Bashe, Fairchild Space & Defense Systems

"A Precision Scanning Unit for Analysis of Micrographs"
G. A. Moore, National Bureau of Standards

"Unilateral Facsimile System Utilizing Multiplexed Wireless Transmission"
H. Weinstein, J. Doherty & B. Smith, Xerox Corporation

November 1, 1968 — Friday P.M.

SESSION IV

SIGNAL TREATMENT

Chairman: R. Nathan

Papers:

"Hardware Rational for Image Processing Experimentation"
R. C. Billingsley, Jet Propulsion Laboratory

"Evaluation of the Detail Rendition in Photo-Electronic Imaging Systems"
R. E. Kinzly, P. G. Roetling & R. C. Haas, Cornell Aeronautical Laboratory

"Computer System for Photographic Image Processing"
S. H. Lerman, Itek Corporation

"Photogrammetric Measurements Using Analytical Continuation Methods"
R. A. Jones & E. K. Stein, Perkin-Elmer Corporation



ANNUAL SYMPOSIUM

Photo-Electronic Imaging

SOCIETY OF PHOTOGRAPHIC SCIENTISTS AND ENGINEERS

Thursday thru Saturday
October 31 and November 1 & 2, 1968Marriott Twin-Bridges
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